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CHAPTER I

IN THE UNITED STATES ELECTED OFFICE (EO/US)

PCT/JP01/03127

11 APRIL 2001

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INTERNATIONAL APPLICATION NO.

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INK COMPOSITION

TITLE OF INVENTION

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APPLICANT(S)

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ATTENTION: EO/US

PRELIMINARY AMENDMENT

Please amend the above identified application as follows:

IN THE CLAIMS :

Please amend claims 3-7, 9, 11, 16-23, 25-26, 28, and 31 as follows:

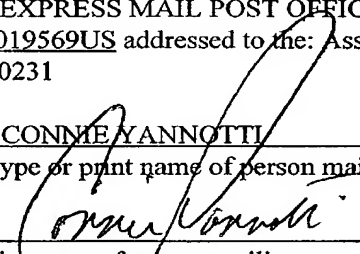
3. (Amended) The ink composition according to claim 1, wherein the glycol monoether is glycol monobutyl ether.

CERTIFICATE UNDER 37 1.10

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4. (Amended) The ink composition according to claim 1, wherein the 1,2-alkanediol has 6 to 8 carbon atoms.

5. (Amended) The ink composition according to claim 1, wherein the glycol monoether is glycol monobutyl ether, the 1,2-alkanediol is 1,2-hexanediol, and the content of the 1,2-hexanediol is less than 2.5% by weight based on the total amount of the ink composition.

6. (Amended) The ink composition according to claim 1, wherein the colorant is a water-soluble dye.

7. (Amended) The ink composition according to claim 1, wherein the colorant is a pigment and which further comprises a dispersant for dispersing the pigment.

9. (Amended) The ink composition according to claim 1, which further comprises a nonionic surfactant.

11. (Amended) An ink jet recording method comprising the steps of: ejecting droplets of an ink composition; and depositing the droplets onto a recording medium to perform printing, wherein the ink composition is one according to claim 1.

16. (Amended) The ink composition according to claim 13, wherein the 1,2-alkanediol is selected from the group consisting of 1,2-butanediol, 1,2-pentanediol, 1,2-hexanediol, 1,2-heptanediol, and a mixture thereof.

17. (Amended) The ink composition according to claim 13, which contains, as the 1,2-alkanediol, 3 to 10% by weight of 1,2-butanediol.

18. (Amended) The ink composition according to claim 13, which contains, as the 1,2-alkanediol, 3 to 10% by weight of 1,2-pentanediol.

19. (Amended) The ink composition according to claim 13, which contains, as the 1,2-alkanediol, 1 to 6% by weight of 1,2-hexanediol.

20. (Amended) The ink composition according to claim 13, which contains, as the 1,2-alkanediol, 0.5 to 3% by weight of 1,2-heptanediol.

21. (Amended) The ink composition according to claim 16, wherein the block polymer resin as the dispersant has an acid value of 100 to 200.

22. (Amended) The ink composition according to claim 16, wherein the dispersant is a block copolymer represented by AB, ABA, or ABC in which:

A is a hydrophilic block;

B is a hydrophobic block and contains at least 30% by weight, based on the weight of the B, of a non-acryl monomer selected from the group consisting of

(1) $\text{CH}_2=\text{CH}-\text{R}$

wherein R represents a $\text{C}_6 - \text{C}_{20}$ substituted or unsubstituted alkyl, aryl, aralkyl, or alkaryl group,

(2) $\text{CH}_2=\text{CH}-\text{OR}^1$

wherein R^1 represents a $\text{C}_3 - \text{C}_{20}$ substituted or unsubstituted alkyl, aryl, aralkyl, or alkaryl group,

(3) $\text{CH}_2-\text{CH}-\text{O}-\text{C}(\text{O})-\text{R}^1$

wherein R^1 is as defined in (2), and

(4) $\text{CH}_2=\text{CH}-\text{NR}^2\text{R}^3$

wherein R^2 and R^3 are each independently selected from the group containing of H and $\text{C}_3 - \text{C}_{20}$ substituted or unsubstituted alkyl, aryl, aralkyl, or alkaryl group, provided that R^2 and R^3 do not simultaneously represent H; and

C may be any desired block.

23. (Amended) The ink composition according to claim 13, which further comprises a nonionic surfactant.

25. (Amended) The ink composition according to claim 23, wherein the nonionic surfactant is contained in an amount of 0.1 to 5% by weight based on the total amount of the ink composition.

26. (Amended) The ink composition according to claim 13, which further comprises a penetrating agent.

28. (Amended) The ink composition according to claim 13, which further comprises 2-pyrrolidone.

29. (Amended) The ink composition according to claim 13, which is used in an ink jet recording method.

31. (Amended) An ink jet recording method comprising the steps of: ejecting droplets of an ink composition; and depositing the droplets onto a recording medium to perform printing, the ink composition being one according to claim 13.

Remarks

The above amendatory action is taken solely for the purpose of avoiding claim fees that would otherwise accrue due to the presence of multiple dependent claims.

Respectfully submitted,



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3. (Amended) The ink composition according to claim 1 [or 2], wherein the glycol monoether is glycol monobutyl ether.
4. (Amended) The ink composition according to [any one of claims 1 to 3] claim 1, wherein the 1,2-alkanediol has 6 to 8 carbon atoms.
5. (Amended) The ink composition according to [any one of claims 1 to 4] claim 1, wherein the glycol monoether is glycol monobutyl ether, the 1,2-alkanediol is 1,2-hexanediol, and the content of the 1,2-hexanediol is less than 2.5% by weight based on the total amount of the ink composition.
6. (Amended) The ink composition according to [any one of claims 1 to 5] claim 1, wherein the colorant is a water-soluble dye.
7. (Amended) The ink composition according to [any one of claims 1 to 5] claim 1, wherein the colorant is a pigment and which further comprises a dispersant for dispersing the pigment.
9. (Amended) The ink composition according to [any one of claims 1 to 8] claim 1, which further comprises a nonionic surfactant.
11. (Amended) An ink jet recording method comprising the steps of: ejecting droplets of an ink composition; and depositing the droplets onto a recording medium to perform printing, wherein the ink composition is one according to [any one of claims 1 to 10] claim 1.
16. (Amended) The ink composition according to [any one of claims 13 to 15] claim 13, wherein the 1,2-alkanediol is selected from the group consisting of 1,2-butanediol, 1,2-pentanediol, 1,2-hexanediol, 1,2-heptanediol, and a mixture thereof.

17. (Amended) The ink composition according to [any one of claims 13 to 16] claim 13, which contains, as the 1,2-alkanediol, 3 to 10% by weight of 1,2-butanediol.

18. (Amended) The ink composition according to [any one of claims 13 to 16] claim 13, which contains, as the 1,2-alkanediol, 3 to 10% by weight of 1,2-pentanediol.

19. (Amended) The ink composition according to [any one of claims 13 to 16] claim 13, which contains, as the 1,2-alkanediol, 1 to 6% by weight of 1,2-hexanediol.

20. (Amended) The ink composition according to [any one of claims 13 to 16] claim 13, which contains, as the 1,2-alkanediol, 0.5 to 3% by weight of 1,2-heptanediol.

21. (Amended) The ink composition according to [any one of claims 16 to 20] claim 16, wherein the block polymer resin as the dispersant has an acid value of 100 to 200.

22. (Amended) The ink composition according to [any one of claims 16 to 21] claim 16, wherein the dispersant is a block copolymer represented by AB, ABA, or ABC in which:

A is a hydrophilic block;

B is a hydrophobic block and contains at least 30% by weight, based on the weight of the B, of a non-acryl monomer selected from the group consisting of

(1) $\text{CH}_2=\text{CH}-\text{R}$

wherein R represents a $\text{C}_6 - \text{C}_{20}$ substituted or unsubstituted alkyl, aryl, aralkyl, or alkaryl group,

(2) $\text{CH}_2=\text{CH}-\text{OR}^1$

wherein R^1 represents a $\text{C}_3 - \text{C}_{20}$ substituted or unsubstituted alkyl, aryl, aralkyl, or alkaryl group,

(3) $\text{CH}_2-\text{CH}-\text{O}-\text{C}(\text{O})-\text{R}^1$

wherein R^1 is as defined in (2), and

(4) $\text{CH}_2=\text{CH}-\text{NR}^2\text{R}^3$

wherein R^2 and R^3 are each independently selected from the group containing of H and

C₃ – C₂₀ substituted or unsubstituted alkyl, aryl, aralkyl, or alkaryl group, provided that R² and R³ do not simultaneously represent H; and

C may be any desired block.

23. (Amended) The ink composition according to [any one of claims 13 to 22] claim 13, which further comprises a nonionic surfactant.

25. (Amended) The ink composition according to claim 23 [or 24], wherein the nonionic surfactant is contained in an amount of 0.1 to 5% by weight based on the total amount of the ink composition.

26. (Amended) The ink composition according to [any one of claims 13 to 25] claim 13, which further comprises a penetrating agent.

28. (Amended) The ink composition according to [any one of claims 13 to 27] claim 13, which further comprises 2-pyrrolidone.

29. (Amended) The ink composition according to [any one of claims 13 to 28] claim 13, which is used in an ink jet recording method.

31. (Amended) An ink jet recording method comprising the steps of: ejecting droplets of an ink composition; and depositing the droplets onto a recording medium to perform printing, the ink composition being one according to [any one of claims 13 to 30] claim 13.